

REMARKS

Favorable reconsideration of the subject application is respectfully requested in view of the amendments above and comments below.

For clarification purposes and at the Examiner's request, "intact modified protein" refers a polypeptide that has a similar size and structural characteristics compared to the native protein. Preferably, the intact modified protein elutes at or near the same position as the native protein on high-pressure liquid chromatography (HPLC). However, the structure of the intact modified protein has been modified biochemically with respect to native protein either by minor enzyme mediated modification or addition to its basic structure, and/or physically through a change in its three dimensional structure so that it escapes detection by conventional means. For example, a commercially available antibody may be specific for a particular epitope on a native protein that is no longer present on the intact modified form of the protein. See paragraph 50 and 53 on pages 9 and 10, respectively.

Claims 1 and 20 have been amended to more particularly point out and claim the subject matter Applicant considers their invention. Specifically, claims 1 and 20 have been amended to be consistent with the changes agreed upon in the interview of March 17, 2004.

Claims 1-5, 7-14, 16-18 and 20-24 are pending in the subject application.

I. Rejection of Claims 1-5, 7, 13-14, 16-17, 20, 21, and 23 Under 35 U.S.C § 112, First Paragraph – Enablement

Claims 1-5, 7, 13-14, 16-17, 20, 21, and 23 stand rejected under 35 U.S.C § 112, first paragraph for allegedly not being enabled by the specification. The Examiner states that, "the ability to detect intact modified protein (ghost protein) of any protein and relating it to renal disease is not enabled with commensurate in scope with the claims." Final Office Action of November 5, 2003, p. 4, lines 15-16.

This rejection is respectfully traversed as follows.

During the interview of March 17, 2004, Applicant and the Examiner discussed how as a general matter, the increasing presence of intact modified protein in the urine correlates with renal disease and/or renal complications of a disease. Applicant's previous response stated that the skilled practitioner does not need to know which, if any particular protein is associated with a particular disease or condition, because the presence of any intact protein or intact, modified protein in the urine is an indication of a renal condition. As evidence of this phenomenon, the Comper declaration filed August 15, 2003, shows the detection intact modified proteins such as IgG and transferrin in diabetic rat urine. Applicant's data clearly show that the methods of the present invention provide urinary protein profiles that are significantly different from those obtained using conventional methods for measuring protein, *e.g.*, immunoassay. The methods of the present invention provide a much more accurate measurement of protein content in urine. Moreover, the data also show that detection of ghost protein by the methods of the invention provides an early indicator of renal disease.

In the Office Action of May 19, 2003, the Examiner stated, "while being enabling for assessing the therapeutic effectiveness of an agent by detecting intact modified albumin, [it] does not reasonably provide enablement for detecting any intact modified protein." p. 5, lines 2-4.

The Comper declaration demonstrates the inaccuracy of this statement. The Comper declaration demonstrates that the methods taught in the specification allow the skilled artisan to detect intact modified IgG and transferring protein in the same manner as the albumin. In the Final Office action of November 5, 2003, the Examiner actually agreed and stated, "[t]he Comper declaration shows an experiment detecting intact and ghost transferring and IgG." p. 4, lines 16-17. In the Interview of March 17, 2003, the Examiner again agreed that there are other forms of intact modified proteins such as IgG and transferrin besides albumin, in the urine of rats

with renal disease and/or renal complications of a disease and that the presence of intact modified IgG and transferrin increased over time with the experimental induction of diabetes.

Given that:

- 1) the Examiner opined that the claims are enabled for assessing the therapeutic effectiveness of an agent by detecting intact modified albumin; and
- 2) the Examiner agreed twice on the record, that there are other forms of intact modified proteins, *e.g.* IgG and transferrin, besides albumin detectable by the methods of the invention, in the urine of rats with renal disease; and
- 3) as a general matter, the increasing presence of intact modified protein in the urine correlates with renal disease and/or renal complications of a disease;

Applicant respectfully asserts that the specification enables the ability to detect intact modified protein (ghost protein) of not only albumin but any protein, and relate it to renal disease and/or renal complications of a disease. Applicant is therefore entitled to the full scope of the claim. Accordingly, the rejection of claims 35 U.S.C § 112, first paragraph is respectfully traversed.

II. Rejection of Claims 1 and 20 Under 35 U.S.C § 112, Second Paragraph – Indefiniteness

Claims 1 and 20 stand rejected under 35 U.S.C § 112, second paragraph, for allegedly being indefinite.

Claims 1 and 20 have been amended to be consistent with the language suggested by and agreed upon with the Examiner to obviate this rejection. Accordingly, withdrawal of this rejection is respectfully requested.

CONCLUSION

It is respectfully submitted that the present application is in condition for allowance, an early notification thereof being earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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